DEPARTMENT OF TRANSPORTATION ADMINISTRATIVE SERVICES DIVISION 1401 EAST BROAD STREET RICHMOND, VA 23219

NOTICE OF CONTRACT AWARD

1. DATEApril 20, 2006		
2. COMMODITY NAME		
3. CONTRACT NUMBERVAPP 23361		
4. CONTRACT PERIODApril 7, 2005 through April 6, 2007 (With 3 one-year renewals possible)		
5. AUTHORIZED USERSState Agencies and Other Public Bodies		
6. CONTRACTORS FIN NUMBER		
7. CONTRACTOR		
8. CONTRACTOR CONTACT PERSONBrian Dunleavy		
9. CONTRACTOR'S PHONE NUMBER		
10. PRICES AND OPTIONS		
11. DELIVERY		
12. FOR FURTHER CONTRACT INFORMATION CONTRACT:Caroline Hudgins (804) 786-2725		
13. FOR ADDITIONAL COPIES OF THIS AND OTHER CONTRACTS AND ANY ASSOCIATE CONTRACT CHANGES, CALL (804)-786-2725.		

INSTRUCTIONS

- 1. Orders: Unless otherwise instructed by the Department of Transportation, institutions and agencies of the Commonwealth of Virginia may order items listed by issuing agency purchase orders (Form DPS-41-056) or by issuing their own purchase order form. Please forward copy of order to VDOT. FAX 804-225-4292 ATTN: Caroline Hudgins
- 2. Virginia cities, counties, towns and political subdivisions may use their own form to order items listed in this contract
- 3. The applicable contract number, federal employer identification number (FIN) and item number (for itemized contracts) must be shown on each purchase order and copy.
- 4. Inspection on delivery or equipment and approval of vendor's invoice is the responsibility of receiving State Agency, Virginia City, county, town or political subdivision.
- 5. Any complaint as to quality faulty or delinquent delivery, or violation of contract provisions by contractor shall be reported to the Department of Transportation for handling with the contractor. Preprinted forms (DGS-41-024), by which to facilitate the notification of the contractor and this office of complaints, are available from the Division of Purchases and Supply (786-3522)
- 6. SPECIFICATIONS: See Attached

TRACTOR(40 HP) WITH MOWER PRICE AND OPTION DATA

Base Unit Cost - 30,069.48 + 2% = 30,670.87 Make & Model – John Deere 5220 w/ Alamo Switchblade Mower

OPTIONS:

Price

Cab Option	\$6,701.69 + 2% Fee* = \$6,835.72
Four-Wheel Drive Option	\$4,407.98 + 2% Fee* = \$4,496.14
* 2% VIRGINIA PARTNERS IN PROCUREMENT SURCHARGE MUST BE ADDED TO TOTAL ORDER.	
Powertrain Warranty – 2WD Tractor – 3 years	\$1,037.00 + 2% = \$1,057.74*
Powertrain Warranty – 4WD Tractor – 3 years	\$1,453.87 + 2% = \$1,482.95*
*Prices will be discounted 20%	
Mower – Full Warranty	
3 years -	\$518.50 + 2% = \$528.87
4 years -	\$1,037.00 + 2% = \$1,057.74
5 years -	\$1,555.50 + 2% = \$1,586.61

MSRP DISCOUNT FOR OPTIONS NOT INCLUDED ON CONTRACT – 15% - 2% fee = 13%



VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

Tractor with Mower (Right Side Cutter Bar), 40HP

General: It is the intent of these specifications to purchase an industrial series tractor with cutter bar mower suitable for mowing highway right of way.

Options: The specifications contain various options for purchase at the time the units are ordered.

Bidders shall quote the additional cost as applicable to the base specifications of the tractor with mower.

Bidder must provide the same make and model of the tractor and mower as bid in the base specifications except for changes necessary to comply with the options.

Engine: The tractor is to be powered by a <u>diesel engine</u> rated at not less than 40 PTO horsepower. Engine is to be equipped with air filter, oil filter, fuel filter, governor, electric starter, alternator/generator, battery, muffler and cold weather starting aid.

Engine coolant is to be ethylene glycol type antifreeze meeting the requirements of TMC RP-329 (fully formulated, low silicate, nitrite containing) mixed 50-50 with water to provide -34° F., protection. Antifreeze is to be on the current Penray® Fill-For-Life program approved list. Documentation should be provided with the bid to show that the coolant is on the list.

If exhaust is vertical, a rain cap or deflector elbow is to be furnished.

Transmission: The transmission is to be a standard manual synchronized shift with not less than 8 forward and 3 reverse speeds. Transmission is to be synchronized for gear changes and have either forward-reverse power shuttle or be synchronized for forward-reverse shifting.

Clutch is to be single stage, 10 3/4" diameter minimum, or hydraulic wet clutch.

PTO & Three-Point Hitch: The PTO is to be 540 RPM, 1-3/8" spline, fully independent, hydraulically activated. To include a shield.

The three-point hitch is to be hydraulically controlled, Category II convertible to Category I. To include sway bars and swinging drawbar.

Both PTO and three-point hitch are to be controlled independently of mower attachment.

Brakes: Tractor is to be equipped with disc brakes, independently operated.

<u>Tires & Drive Train</u>: Tractor to be equipped with not less than 7.50 x 16 or LT235/85R16, load range E, truck type tires on front axle. Tires to be Goodyear Unisteel G159, Michelin XPS, or an equal tire <u>with full steel casing and steel belts</u>. Front axle is to be maximum capacity heavy duty unit available from the manufacturer for highway work. It is to be equipped with power steering.

Rear tires are to be not less than 16.9 x 24, 6 ply, R4 tread.

Rear axle is to have differential lock.

ROPS: A roll bar with canopy is to be furnished according to OSHA Standards. Any other equipment required to meet current OSHA Standards shall also be furnished.

Instrument panel is to include tachometer, hourmeter, engine temperature indicator (if water-cooled), oil pressure indicator, and charging system indicator.

Operator's seat is to be spring suspension type, fully upholstered, with full operator backrest or be wrap around design. It is to include a seat belt.

Tractor lighting is to include at least two headlights, taillights, turn signals, and two amber flashing warning lights visible to both front and rear.

The tractor is to be equipped with a rearview mirror.

<u>Tractor Hydraulics</u>: The tractor is to have dual remote hydraulic valves with spring center returns. One valve shall have at least one detent to provide constant operating pressure and the second valve shall have at least one detent float position. Hydraulic outlets are to be at rear of tractor and have industrial style valved quick disconnects, 3/8" size. Mating nipples shall be provided for each disconnect.

Tractor hydraulic system is to provide at least 9.2 GPM to the rear hydraulic outlets.

Mower: A hydraulically controlled right side cutter bar is to be furnished and mounted in front of rear wheel. Cutter bar to be heavy duty, 6' in length, to operate at an angle of not less than 80 degrees above and 45 degrees below horizontal and must have tilt of approximately 5 degrees up and 5 degrees down from horizontal. It shall be capable of cutting the full 6' length of the cutter bar in any height grass without clogging. The hydraulic drive motor shall be mounted on the cutter bar and directly coupled to the cutter bar. Pitman arm design will <u>not</u> be acceptable. Mower is to be designed so that it is mounted as close to the tractor centerline as practical. Tractor mower must have hydraulic curb or vertical lift. To have an automatic safety mechanism to allow the cutter bar to breakaway to a maximum of 90 degrees when an obstruction is encountered and be self-returning. Return mechanism shall have shock absorber to cushion cutter bar return. Controls to be independent hydraulic for curb lift or inner shoe and for cutter bar operation. Shall have full-floating position to allow the inner shoe to follow the terrain

contour. Mower shall be equipped with a stay rod, lock pins, or chain to support cutter bar and remove the load from the hydraulic cylinders during transportation.

The mower shall be side-mounted to the tractor, using a full-length frame with either 4" x 4"x 5/16" or 3" x 5"x 1/2" steel tubing mounted to the front bolster of the tractor and to the rear axle of the tractor. Framework bolted to the bell housing of the tractor will not be accepted.

Hydraulic pump is to be front mounted, crankshaft driven. Pump shall have two sections, one to power the cutter bar and the other to power the mower hydraulic cylinders. Pump is to be sized to provide adequate flow to the mowers at engine speed equivalent to 540 PTO RPM without overheating the hydraulic system. Hydraulic system shall have relief valve to protect mower components in the event of a knife jam.

Hydraulic reservoir is to be located so as not to restrict airflow to radiator or interfere with servicing of tractor. To be designed so that filter can be changed without draining reservoir. Reservoir is not to block headlights.

Mower shall be mounted by mower manufacturer at their manufacturing facility to insure uniformity and quality of the installation.

Hydraulic Workmanship: Any hydraulic components added to the equipment by the original equipment manufacturer, selling dealer, mower manufacturer, or aftermarket supplier shall use the best practices of the industry. All hydraulic lines are to be correctly sized and rated for system requirements. Any threaded components requiring sealant are to be treated with thread sealant. Teflon tape on fittings and other threaded connections is not acceptable.

All hydraulic components are to be securely attached as recommended by the manufacturer. Tubing and hoses shall be protected by grommets wherever they run through metal panels. Hoses shall not be installed at less than the manufacturer's listed minimum bend radius. Hoses shall be provided with a protective sheathing wherever abrasion may occur due to movement of components. Sheathing may be a heavy duty nylon product or flexible steel product.

Miscellaneous: A slow-moving vehicle emblem is to be affixed to rear of tractor.

A front bumper/grille guard is to be furnished on the tractor. It is to protect the front of the hydraulic pump and at least 4" elevation below the pump.

Two brackets, designed to hold two spare knife bars, are to be furnished and mounted on hood sides or in a convenient location on tractor.

All attachments and accessories are to be mounted on the tractor so as not to create a safety hazard for the operator or interfere with accessibility to air, oil, and fuel filters, other normal service requirements, and normal operations.

General Workmanship: All workmanship shall be in accordance with good commercial practices. All cutting, drilling and machining are to be finished so that edges are smooth. <u>Hand cutting by torch is not acceptable.</u> Welds shall be finished to insure satisfactory appearance of the completed unit.

Electrical Workmanship: Any electrical components added to the equipment by the original equipment manufacturer, selling dealer, body company, or aftermarket supplier shall use the best practices of the industry. <u>Absolutely no</u> ScotchlokTM or similar quick connectors shall be used in the electrical wiring.

A properly designed circuit with a fuse or circuit breaker for protection shall be provided. External (outside of cab) electrical connections and wiring shall be in weatherproof enclosures or inside surface mount plastic junction boxes with covers. Junction boxes to be Betts Part #470041 or approved equal. To have internal terminal block for wiring junctions. To use compression fittings on jacketed cable, or accept plastic conduit (not vinyl tubing), to make a weatherproof seal.

Internal (inside of cab) electrical connections and wiring shall be in a protective enclosure to prevent accidental damage.

All wire ends (both external and internal) shall be fitted with the proper size spade, lug or ring terminals. Terminal to wire connection shall be properly crimped and/or soldered <u>and</u> protected with proper heat shrink tubing. All spade terminals or pin type wire connections shall be coated with a corrosion preventative compound, similar to Truck-Lite's NYK-77, designed for use with electrical switches, contacts and terminals.

Correctly sized grommets are required to protect wires wherever they run through panels. If panel separates interior and exterior surfaces, it shall also provide a weathertight seal. A grommet shall be provided even if it is necessary to use additional sealer to make the area weathertight.

Paint: Tractor and mower shall be manufacturer's standard color.

Advertisement: No stickers, decals, or plates displaying dealer or distributor name or logo shall be affixed to equipment. Manufacturer plate with model and serial number is to be on the equipment.

<u>Warranty</u>: The complete unit (tractor and attachment) is to be warranted for a minimum period of 24 months from the date it is placed in service by VDOT. Warranty is to include all items covered under the manufacturer's standard warranty. Wear items such as blades, guards, etc., are excluded. The manufacturer shall agree to replace any parts that fail during normal use. Warranty repairs for the tractor are to be performed by any authorized dealer of the manufacturer. Warranty repairs for the attachment are to be performed either by the manufacturer at the VDOT location of the unit, by any authorized dealer of the manufacturer or

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by VDOT personnel with labor charges billed to the manufacturer. The method chosen is to be by mutual agreement of the VDOT District Equipment and Facilities Manager, VDOT Equipment Division and the manufacturer.

Any forms required for updating warranty start dates are to be delivered to the VDOT District Equipment and Facilities Manager at the time the unit is delivered. A copy of any extended warranties for all components, including but not limited to engines, driveline components, chassis, and cab components, shall be provided to the VDOT District Equipment and Facilities Manager. All forms must be received before the unit will be accepted for payment.

Spare Filters: Each machine delivered is to include one spare filter for each system (air, fuel, engine oil, hydraulic, etc.) on the machine. Filters are to be boxed and labeled for each receiving location. Shipping loose in the cab of the machine is not acceptable. All filters must be received before the unit will be accepted for payment.

Delivery: Equipment shall be delivered to District Headquarters locations listed in the Request for Quote (RFQ). Unit to be fully assembled and ready to operate, and all training, forms, and other items required by this specification must be furnished, before being accepted for payment by VDOT.

Equipment shall be delivered on a trailer with the capability of having the unit unloaded directly from the trailer without the aid of a loading ramp. VDOT personnel will not be obligated to unload any equipment delivered on a trailer requiring a loading ramp.

Deliveries will be accepted only between the hours of 8:30 a.m. and 4:00 p.m. on regular workdays. No deliveries will be accepted on weekends or state holidays.

<u>Pilot Model</u>: A pilot model will be required. It will be inspected and then placed in service for a minimum of three working days. Upon satisfactory operation, approval to ship the remaining units will be given by VDOT's Equipment Division. <u>NOTE</u>: <u>The pilot model is to be delivered to a district location specified by VDOT's Asset Management Division, Equipment Section.</u>

Contact the Assistant Director for Equipment Management's office at (804) 236-3649 to schedule delivery. The district locations will not accept delivery of any units until the pilot model has been approved.

<u>Operation and Maintenance Instruction</u>: A manufacturer or dealer representative of <u>both tractor and attachment</u> is to inspect the equipment after delivery and provide technical instructions on the operation and maintenance requirements for the unit to each district receiving equipment. This must be scheduled with the VDOT District Equipment and Facilities Manager. The manufacturer/dealer furnishing the equipment must agree to allow these instructional sessions to be videotaped by VDOT to be used for future instructions for VDOT personnel. <u>This instruction must be performed before the unit will be accepted for payment, unless waived by VDOT.</u>

<u>Current Model</u>: Equipment is to be a standard proven model of manufacturer's latest current production <u>and include all standard equipment as advertised</u> with additional optional equipment outlined herein. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer. Manufacturers of the units supplied must have been in the business of producing operational units for at least <u>five</u> years. The model furnished must have been in production and in use by customers for at least <u>two</u> years, or be the latest version of a previous model. Bidder should be prepared to provide documentation to VDOT that within the previous three years at least 100 units representative of the make and model bid have been sold in the United States. A list of owners and their telephone numbers may be requested.

<u>Bid Literature</u>: Descriptive literature will be required to substantiate the details specified in bid.

Equipment Data Sheet: Upon receipt of order, successful bidder will be furnished an "Equipment Data Sheet" requesting details of unit being furnished. It is to be completed and returned to the VDOT Asset Management Division within six calendar weeks after receipt. Unit delivered must be in accordance with information furnished on the Equipment Data Sheet unless otherwise approved by the Asset Management Division.

<u>NOTE</u>: The Equipment Data Sheet must be completed and returned by mail to the VDOT Asset Management Division, Equipment Section, 1401 East Broad Street, Richmond, VA, 23219, or by fax to (804) 236-3609, before unit(s) will be approved for payment.

<u>Manuals and Parts Lists</u>: Successful bidder shall furnish <u>one operator's manual, one shop service manual</u>, and <u>one parts list</u> in CD-ROM or microfiche <u>for each unit delivered</u>. If microfiche, parts lists to be 4" x 6" cards, positive or negative, 24X or 42X magnification. All manuals and parts lists under any circumstances must be congruent with the unit delivered and shall include information on all components and items furnished. Additionally, shop service manual information may be provided by allowing access by all VDOT shop locations to the manufacturer's website containing service manual information.

Shop service manuals are to be provided for all components and systems of the unit, including mechanical, hydraulic, electrical, emissions, and any computer controlled systems that require programming for repair or operation. These are to include the engine, transmission, and driveline components.

<u>Two additional</u> copies of operators' manuals, shop manuals and parts lists are to be delivered to each receiving district.

<u>Technical Service Bulletins</u>: Successful bidder shall provide technical service bulletins (TSBs) for all equipment delivered to a VDOT district location for a period of <u>five years</u> from the date of delivery. TSBs may be furnished in paper format, on CD-ROM updated regularly, or by allowing access to the manufacturer's website containing TSBs by all VDOT shop locations.

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VDOT personnel will monitor receipt of TSBs and annually contact the vendor/manufacturer if no TSBs are received.

Technician Training: The successful bidder agrees to conduct training sessions developed specifically for VDOT's equipment repair technicians. The training will be scheduled through VDOT's contracted training coordinator, ManTech Systems Engineering Corporation. Bidder shall provide the name and telephone number of the equipment manufacturer's training representative in the blanks at the end of this section. Training is to be performed, as determined by VDOT, approximately six to twelve months after the last unit is placed in service by VDOT.

Training topics will be determined by VDOT and communicated to the manufacturer's training representative by ManTech. A list will be sent to the manufacturer's training representative detailing any problems VDOT has encountered with the equipment. Training shall include complete diagnosis and repair of the listed problems as well as detailed preventive maintenance procedures (A, B, C, & D levels) and discussion of any problems or updates known by the manufacturer. ManTech will send the list to the manufacturer two months prior to the scheduled training date.

One training session will be scheduled in each district (at the district equipment section location) that received the equipment. The maximum number of training sessions required per year would be ten. For renewable term contracts, training sessions will be required each year orders are placed from the contract.

Training sessions will include a minimum of 16 hours (two eight-hour days) of training.

Manufacturer's Training Rep	resentative	
Name:		
Telephone Number:		
•	* * * * * * * *	
	OPTIONS	

Option 1: **Cab**: The tractor is to have a factory installed cab. It is to include safety glass, heater/defroster, factory installed air conditioner, front windshield wiper, and ROPS structure as required by OSHA. Cab to be flat deck design.

Instrument panel is to include tachometer, hourmeter, engine temperature indicator (if water-cooled), oil pressure indicator, and charging system indicator.

Operator's seat is to be spring suspension type, fully upholstered, with full operator backrest or be wrap around design. It is to include a seat belt.

Tractor lighting is to include at least two headlights, taillights, turn signals, and two amber flashing warning lights visible to both front and rear.

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The tractor is to be equipped with right and left outside mirrors.

Cab side (door) on the mower side is to have a window in the lower portion near floor so that the operator can see the heel of the mower.

Option 2: **Four Wheel Drive**: The tractor is to be equipped with manufacturer's front wheel drive option. Front wheel drive is to be designed so that it can be engaged or disengaged by the operator. To be equipped with power steering. Front tires are to be 6-ply rating, R1 or R4 tread and must be matched in size with rear tires to insure proper operation with front wheel drive engaged.

Option 3: Training Video: (This is not a required option and will not be used in determining the bid award.) It is desired to secure video tapes in VHS format outlining operation and maintenance requirements for the units furnished. The tape should include information normally covered in the operator's manual including basic operation techniques, basic maintenance and safety concerns. The tape shall be produced by the equipment manufacturer for the specific unit furnished, or be endorsed by a road maintenance/construction organization such as the Construction Industry Manufacturer's Association (CIMA). Tapes are desired for engines, transmissions, attachments and other components not covered by the manufacturer's video. Please list the items available with the name, part number, a brief description of the contents and the price on the bid sheet.